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IMPROVING THE COMPETITIVENESS OF THE PUBLIC AND PRIVATE SECTOR BY NETWORKING COMPETENCES

SOME ASPECTS OF MEASURING AND PERFORMANCE MEASUREMENT SYSTEMS IN SMALL AND MEDIUM SIZED ENTERPRISES

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Abstract: Implementation of contemporary performance measurement systems can improve the competitiveness of small and medium sized enterprises (SMEs). Given that fact, the aim of this paper is to highlight the importance and some main challenges that SMEs are faced with while trying to implement these systems, and also to try to identify possible ways for overcoming the gap between theoretical suggestions and practical behaviour of SMEs. After pointing out the differences between traditional and contemporary approach to performance measurement, this paper will indicate the possible effects that contemporary performance measurement systems can have on improvements of SMEs' competitiveness. Although the possible contribution of these systems is well known, both theoretically and empirically, the implementation of contemporary performance measurement systems is faced with many challenges in most of SMEs. One of the main barriers refers to the fact that these systems are not fitted to the specific management needs in SMEs. Therefore, identification of specific characteristics of SMEs and lining them up with desirable attributes of the performance measurement system is the first step in dealing with problems that are related to measurement of business successfulness in SMEs.

Key words: measurement of performances, performance measurement systems, small and medium sized enterprises, competitiveness.

Introduction

Maintaining and improving the competitiveness of the enterprises requires an appropriate business performance management. A key activity in the performance management is their measurement. An integral part of this process is the identification and selection of adequate indicators that would be used to

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monitor different dimensions of business performances. A set of selected performance measures makes a company's performance measurement system (PMS) (Neely, Gregory and Platts, 1995, pp. 80-81).

The increasing importance of the performance measurement in modern business practice is indicated by the fact that there are increased investments in improving the quality of management-control activities, in both the private and public sectors (Micheli and Manzoni, 2010, p. 466). This is additionally confirmed by the fact that there is an intensive academic discussion of the ways for performance measurement systems' improvement. The conceptual framework of the performance measurement (the measurement dimensions, the selection of measures etc.) in an enterprise is, in fact, its measurement system and a multifunctional management tool. In that sense, Micheli and Manzoni (2010, pp. 469-470) suggest that PMSs have an important diagnostic and interactive role, or that they may be an important tool for shaping the organizational culture and defining the behavioural framework in the company. As a diagnostic tool, these systems help in the strategy implementation process. Their interactive role is reflected in the fact that these systems are means of communication within the organization, and between organization and its external environment, but also a tool which supports the improvements (redefinition) of a strategy. Designing a performance measurement system, by selecting the specific performance measures, is, in fact, a way to inform the members of an organization about its vision and mission. In this way the desired employees' behaviour can be promoted and encouraged. By defining the target values of selected performances, values that will be controlled through a process of strategic and operational planning, the action frames for an organization's members are placed.

Development and implementation of the PMSs are mainly associated with large companies (Garengo, Biazzo and Bititci, 2005; Gumbus and Lusier, 2006; Cocca and Alberti, 2010). On the other hand, although the potential contribution of these systems to the competitiveness of small and medium enterprises is recognized (McAdam, 2000; Andersen, Cobbold and Lawrie, 2001; Hudson, Smart and Bourne, 2001; Zinger, 2002; Gumbus and Lussier, 2006; Krstić and Bonić, 2006; Garengo and Bernardi, 2007; Taticchi, Cagnazzo and Botarelli, 2008; Cocca i Alberti, 2010), there is a modest implementation of the PMSs in these enterprises (Garengo, Biazzo and Bititci, 2005). The reason for this should be sought in the fact that the most of the PMSs are developed taking into account the needs and characteristics of large companies, and that, as a very strategically-oriented and resource-demanding, these systems are not adjusted to the needs of SMEs (Hudson-Smith and Smith, 2007).
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In Small and Medium Sized Enterprises

1. The New Approach in the Business Performance Measurement

An efficient management process requires an adequate performance measurement system. The data that these systems should provide are an informational input for the operational and strategic management. Depending on the breadth and the depth of data provided, the PMSs can generally be classified into two groups—a group of traditional and a group of modern systems. The focus of traditional PMSs is on monitoring, measuring, and reporting about the financial performances of a company. They are based on the accounting information system (Krstić, 2003, p. 155). On the other hand, a multidimensional performance measurement of the modern PMSs provides a wider insight into the company's operations. The emergence of the modern PMSs is linked to the last two decades of the 20th century, when the need to monitor and measure the performances outside the financial dimension became evident. In that line, it became necessary to define the logically integrated systems that would connect the financial and nonfinancial business performances in a cause and effect manner (Laitinen, 2002, p. 66). Such a system is, for example, the Balanced Scorecard (Kaplan and Norton, 1992; Kaplan and Norton, 1996) or, on its basis later developed Performance Prism (Neely, Adams and Kennerley, 2002) which emphasizes a stakeholder approach to performance measurement.

A criticism of the traditional performance measurement systems has grown into a constructive mindset that gave an impetus to the development of the systems with a wider measurement base, adding a set of nonfinancial measures to the financial ones. The fact that the financial results are the consequence of the performances achieved in the non-financial business area requires to be reflected in the design of the PMSs. In other words, accepting the premise that the financial perspective is supported by the other aspects of the business operations should be accompanied by pointing out everything that stands behind the integrated financial result—the profit and the rate of return. Therefore, an effective PMS of a certain enterprise should cover all relevant dimensions of its business—financial and nonfinancial ones.

Although the criticism of the historical nature and of the one-sidedness of the financial measures is justified, it cannot be said that these measures are not needed or that they are superfluous. At the time of the strategy formulation the relations between the operations and the financial results are just assumed and can only be verified ex post. Because financial performance measures, as the "lagging" measures, indicate the contribution of the "leading" indicators (Kaplan and Norton, 1992), they are the final word in the evaluation of the strategy success. In the bottom line, there is a need for any business improvement to be reflected in the financial dimension of the measurement system. So, the modern
PMSs are not a substitute, but a complement to the traditionally dominant financial perspective (Kaplan and Norton, 1996, p. 75). The modern PMSs are the dynamic decision support systems that enable a balanced approach to data collection and analysis of an enterprise’s performances (Neely, Adams and Kennerley, 2002, cited in Garengo, Biazzo and Bititci, 2005, p. 25).

The PMS suitable for the modern business environment should be able to meet the multi-dimensional information demands and to serve the purpose of measuring the effectiveness and the efficiency of the tangible and the intangible resources’ utilization (Krstić, 2003, p. 161). In addition to the expansion of the base for the performance measurement, features of a modern PMS should also be: the integration of the strategic and the operational goals; definition of the objectives, measures and their target values, and initiatives in each of the measurement dimension; the identification of the cause-effect relationships within and between the perspectives of the measurement (Gimbert, Bisbe and Mendoza, 2010, p. 480).

2. The Relevance of the Contemporary Performance Measurement Systems for SMEs’ Operations Improvement

The financial performances measures are not sufficient support for making appropriate business decisions in the modern business environment (Laitinen, 2002, p. 68). Globalization and its pressure on the business competitiveness, the evolution of the total quality concept and the necessity for the continuous improvement, promote the implementation of the modern performance measurement systems in SMEs (Garengo, Biazzo and Bititci, 2005, p. 26, 27; Krstić and Bonič, 2006, p. 47). The development and wider availability of information and communication technologies are the basis for easier and faster implementation of these systems in SMEs.

One of the characteristics of a modern PMS is its relation to the strategy. The design and the implementation of a system must be consistent with the strategy because this is the way to connect the strategy with the goals of the organizational units, business functions, and individuals (Kaplan and Norton, 1996, p. 76; Garengo, Biazzo and Bititci, 2005, p. 30). The connection between the operational and the strategic sphere of the business activities is the determinant of SMEs’ competitiveness (Hudson, Smart and Bourne, 2001, p. 1105). However, it often happens that SMEs (and particularly the small ones) do not have a formally defined strategy (Garengo, Biazzo and Bititci, 2005, p. 31), which is a problem in a situation when a specific set of measures need to be derived out of a strategy. In this sense is the affirmation of the need for a strategy formulation in SMEs. The performance measurement systems have a key role in the strategy formulation and the implementation process. In addition

to consensus about the direction of a business system, these systems provide the focus, which, although long-termed, SMEs do need (Andersen, Cobbold and Lawrie, 2001, p. 3).

The performance measurement systems should be derived from the strategy, but they shouldn't serve it in a static and uncritical way. In other words, although carried out and coordinated with an existing strategy, an effective PMS should stimulate a continuous monitoring of change and a critical assessment of the established strategic movement direction. Namely, the dynamic of the modern PMSs means continuous review of the objectives, priorities and performance measures on a base of continuous monitoring of changes in internal and external environment (Garengo, Biazzo and Bittici, 2005, p. 32; Taticchi, Cagnazzo and Botarelli, 2008, p. 11; Cocca and Alberti, 2010, p. 187). Full contribution of the performance measurement system implies its informational support to the continuous revision, i.e. improvement of the strategy. Such contribution can be provided only by a dynamic, continuously improved PMS. These are the systems whose elements (measures) are in line with changing business conditions and strategic priorities (Suwingjo, Bittici and Carrie, 2000, p. 240). As it is in big companies, so it is in SMEs, the measurement is a basis for the entire management process. The PMSs can have a significant impact on the achievement of SMEs' competitive advantages, as well as on the continuously adaptation, the responsiveness to the changes and the improvement of their performances (Taticchi, Cagnazzo and Botarelli, 2008, p. 2; Cocca and Alberti, 2010, p. 186).

By analyzing the essential features of the modern PMSs, Garengo, Biazzo and Bittici (2005, pp. 31-32) point out that the design of these systems focus the attention on the demands of constituents who, finally, evaluate the business performances. In this regard, these authors argue that SMEs need to focus on a smaller number of key stakeholders and to simplify the assessment of their interests. Also, a feature that is common to the most modern PMSs is a balanced and a multidimensional approach to the performance measurement. Although different models of PMSs balance the various aspects of measurement (short-long term aspect, internal-external, financial-non-financial), they still emphasize different perspectives of the performance measurement. A comprehensive and balanced approach to the performance measurement is especially the need of SMEs as a complement to the current approach, which emphasizes the financial and the operational sphere of the measurement. Narrowed focus of performance measurement in SMEs has resulted in suboptimal behavior of their employees (Davig, Elberth and Brown, 2004, p. 18). For example, focus on costs and linking the compensation systems for the target level of costs may jeopardize the quality.

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Some authors, has argued that, in the context of analyzing the needs for the modern PMSs, the SMEs sector should not be regarded as homogeneous (Zinger, 2002, Garengo, 2009). Zinger (2002, p. 19) emphasizes that organizationally more complex and dynamic SMEs have a greater need for the Balanced Scorecard as one of the modern models of performance measurement. In these companies the Balanced Scorecard could be a mean to coordinate the strategy implementation process, to support the process of innovation, as well as to establish a quality, partnership relations with the key external stakeholders. In the long run, this should lead to the economic stability and sustainable growth of these enterprises. The growth of the complexity of the organization and its environment should be supported by the improvement of the capacity of the enterprise to solve new and different problems. Otherwise, the crisis situation may arise. As the momentum for improving organizational, production, sales and other capabilities of SMEs, the PMSs are important for the process of organizational learning (Garengo and Bernardi, 2007, p. 528). Moreover, emphasizing the dimension of employees in the development of the Balanced Scorecard means their inclusion in the definition of the objectives, which should lead to the improved communication and their motivation to achieve goals (Zinger, 2002, p. 15). Also, integrating a vision into a single Balanced Scorecard (for the level of the company as a whole) should, as an anchor, maintain management focus on development of the core competencies, and core businesses. This will possibly prevent an inadequate or non-profitable diversification.

The emergence and the implementation of the concept of Total Quality Management (TQM) promotes the expansion of coverage to the non-financial performance measurement dimensions, given that quality is seen as a result of the total contribution of all members and segments of an organization (McAdam, 2000, p. 319 and Sousa and Aspinwall, 2010, p. 475). A multidimensional approach to the performance measurement is of a particular need to those companies that have joined some program of monitoring and rewarding business quality (or so called business excellence). In accordance with this are the results of research showing that more advanced and more complex PMSs are typical for those SMEs that have been awarded for the achieved quality (Garengo, 2009, pp. 102, 103). These awards are a part of national business quality awarding systems based on models like MBNQA (Malcolm Baldrige National Quality Award), EQA (European Quality Award), and the like (Krstić and Sekulić, 2007, pp. 345-347). These models define a set of criteria for assessment of the business performances. Also, on a basis of their contribution to the overall quality (business success), these models identify the relative importance of each of the defined performance measures. By aggregating the various aspects of business performances in a form of a final

score (which reflects the overall performance of the business success), these models are encouraging the improvement of the quality of products/services, business processes and activities.

According to Sibbet (1997, p. 11), the Balanced Scorecard is one of the most influential management concepts of the 20th century. As a possible model of business performance measurement, the Balanced Scorecard has the necessary breadth in performance measurement and provides the necessary logical connection between individual measurement perspectives (Kaplan and Norton, 1992; Kaplan and Norton, 1996), and between the performance measures. Although in the most cases, the implementation of the Balanced Scorecard is associated with the large companies (Fernandes, Raja and Whalley, 2006, p. 623), there is some understanding that this model can be applied in SMEs as well (McAdam, 2000; Andersen, Cobbold and Lawrie, 2001; Gumbus and Lussier, 2006; Kristić and Bonić, 2006). In that line, Gumbus and Lussier (2006, p. 410) point out that "Balanced Scorecard can be applied in organizations with 5 or 5000 employees working to achieve the same goal." According to McAdam’s research (2000, pp. 316-317, 319), an implementation of the Balanced Scorecard in SMEs can lead to more satisfied customers. The experiences of some SMEs indicate that the improvement in the dimension of internal business (and management) processes led to the expansion of product range, thanks to the improvement and the innovation of products/services. The Balanced Scorecard implementation in SMEs can initiate some necessary changes indicating a key weakness in these companies, such as, for example, a lack of the continuous training and the development of human resources. In contrast to the effects in large companies, the Balance Scorecard implemented in the researched SMEs had not contributed to that strategy which became clearer to members of the organization. The reason for the absence of this effect should be sought in the fact that the employees in SMEs, due to the smaller size and organizational complexity of these enterprises, are aware of the vital elements of the company’s strategy to a greater extent.

For the success of SMEs, as well as for the success of large companies, there has to be a strategic focus. In addition, there are certain key strategic issues that are important to large and small organizations which can be supported by the Balanced Scorecard (Andersen, Cobbold and Lawrie, 2001, p. 2; Gumbus and Lussier, 2006, p. 410). By defining the vision and then goals derived from it, but also the initiatives for their achievement, the Balanced Scorecard clearly shows the direction of an enterprise. Focus on the strategic goals promotes the growth of SMEs. The promotion of SME’s growth may be crucial given that, in addition to objective factors, substantially limit to the growth of these enterprises
is a subjective factor, i.e. owner-manager's aversion to risk associated with growth (Predić, Stefanović and Stošić, 2010, pp. 178, 180). Linking the strategy with the operational sphere of business activities, the Balanced Scorecard balances the necessity of the long-term growth and the short-term, almost daily, operational pressures that SMEs' management is faced with. Also, in this way the objectives, as well as a possible individual contribution to their achievement, become clear to the employees. The Balanced Scorecard enables tracking of individual or collective achievement in relation to their target values which is the basis for corrective actions and improvements. By identifying the individuals responsible for achieving targets, linking them with specific performance measures in the Balanced Scorecard, the level of personal responsibility for achieving the defined goals will be raised.

The Balanced Scorecard helps the management of large companies in identifying and monitoring performance measures, which in turn informs about the degree of objectives' achievement. This aspect of the Balanced Scorecard's contribution is less pronounced in SMEs, due to the fact that managers in these enterprises are more familiar with their business performances, given their smaller size and complexity. Specifically, those that define a strategy (mostly business owners) in SMEs are more aware about its operational implementation (Hoque and James, 2000, p. 3). Therefore, the need for formal monitoring of the performances in these enterprises is less pronounced. However, even if the strategy is implemented by those who define it, a cyclical nature of the strategic management requires understanding of the causal relationship between the leading and the lagging performances indicators. So, SMEs also need to identify and monitor measures in order to test hypotheses about the cause-effect relationships between different dimensions of business performances. Also, given the evident problems in communication, coordination, and control (Andersen, Cobbold and Lawrie, 2001, p. 2), large enterprises have a greater need for a "clarification" of their strategies through its translation into a set of clear objectives. On the other hand, due to the dominant, one-sided approach to the performance measurement that managers in SMEs have, a greater contribution of the Balanced Scorecard in these companies may be in the field of holistic coverage of business. In doing so, identifying the key measures and the causal relationship between them in SMEs can be easier given their smaller size, the organizational simplicity, and the lower level of diversification. A closer relationship with the customers, as well as simpler organizational structure, may contribute to a clearer perception of the key performances' drivers (factors) in every key perspective in the Balanced Scorecard of a specific company.
3. Practical Aspects of the Analysis of Performance Measurement Systems in SMEs

Despite the described importance that the modern performance measurement systems may have for business and competitiveness of SMEs, most of these enterprises do not use some measurement system, or do, but not in an adequate way (Garengo, Biazzo and Bititci, 2005, p. 28). The performance measurement systems are mainly not adapted to the specificities of SMEs. It happens that the managers of a SME, in order to simplify a PMS, eliminate some measurement dimensions from a generic measurement model, without any analytical approach.

SMEs often measure what is easy to measure (because there is a standardized metric) rather than what is important to measure (Partridge and Perren, 1997 cited in Davig, Elberth and Brown, 2004, pp. 18, 23). Usually they monitor performances only in the financial and the operational perspective (Hudson, Lean and Smart, 2001, pp. 804, 805; Davig, Elberth and Brown, 2004, p. 18; Garengo and Bernardi, 2007, p. 524; Cocca and Alberti, 2010, p. 192). In this way the needed holistic and systematic approach to the performance measurement are lost. It seems that the design and the implementation of the performance measurement systems in SMEs are still without a balanced, comprehensive, and planned approach. In addition, limited resources are allocated to the collection and processing of the data which are used for control rather than for planning (Garengo, Biazzo and Bititci, 2005, p. 29; Garengo and Bernardi, 2007, p. 525).

In addition to a balanced approach to the measurement of the business performances from different dimensions, an important characteristic of the modern PMSs is the logical linking of leading and lagging indicators. Simply expanding the volume of performance measures, without a cause-effect connection between different measurement perspectives, would not provide the needed benefits of the PMSs implementation in SMEs. In fact, without considering the cause-effect relationships between performance measures from different performance measurement dimensions, as well as within certain dimensions, it cannot be expected to improve the decision-making process and the competitiveness of SMEs. This is confirmed by the research results which show that the SMEs which have a wider approach to the performance measurement are not significantly better than those that focus on financial measures (Davig, Elberth and Brown, 2004). While SMEs do measure their performances by selecting the measures within the measurement dimensions defined by the Balanced Scorecard, they still do not recognize the interconnectedness of these measures, do not question the existence of causal
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links between measures within different dimensions and, thus, the obtained data are not used as a support for the decision making process and the improvement of the performances (Davig, Elberth and Brown, 2004, p. 22; Cocca and Alberti, 2010, p. 192).

A study of the performance measurement practices in SMEs (Hudson, Smart and Bourne, 2001, pp. 1106-1108) showed that the only common feature of the PMSs that had been implemented in the analyzed SMEs was a significant number of the financial measures. In the most cases the measures were not associated with the strategy and referred to the past, i.e. had a historical character. A fact that the implemented PMSs had provided the management with the information in a volume bigger than necessary, which had created an informational overload, was one more drawback of these PMSs. Also, even when the data were relevant, only in one case there was a recorded existence of a formal reporting system, in a form of monthly meetings. In those SMEs that have adopted a modern approach to the performance measurement, both internal and external factors have initiated the implementation of the PMS. So, the need to solve the identified business problems, and the need for a higher level of control are the primary reasons for the PMSs' application. Implementation of the modern PMSs is also an increasingly common request of SMEs' customers. However, the implementation of these systems in SMEs is often not the result of strategic thinking, but an ad hoc action of the individual managers. This leads to that a wider circle of employees do not understand the essence and importance of the implemented PMS.

The main shortcomings of the performance measurement in SMEs are related to the narrow focus of measurement, lack of understanding of cause-effect relationships between performances in different perspectives, informality and static character of the PMS that does not follow the change in strategy, problems in communication about the measures and their use (Hudson, Lean and Smart, 2001, p. 805; Cocca and Alberti, 2010, p. 192). It is evident that there is a significant gap between the theory, which emphasizes the importance of the PMSs, and the practice, which almost does not recognize the model of the PMS that is adapted to SMEs (Garengo, Biazzo and Bititci, 2005, p. 29). In such an environment, the existing PMSs in SMEs do not contribute to the achievement of the strategic goals of these enterprises, but rather may represent a barrier to achieving them (Hudson, Lean and Smart, 2001, p. 805).

Dealing with the implementation of modern management tools in the Serbian companies, Andjelković-Pešić and Krstić (2010) point out that only 25% of the analyzed companies implemented the Balanced Scorecard and Performance Prism, while just over one-third of the companies (38%) based their business on the principles of the Total Quality Management. In the studied
companies there was a significantly higher implementation of ISO standards (71%). Besides the lack of implementation of the modern PMSs, additionally concerns are about the fact that managers are largely ignorant when it comes to the essence and purpose of these models. Even when there are attempts to implement some modern PMS, they are not undertaken in a consistent manner. Thus, for example, it was observed that managers had adopted the idea of the Balanced Scorecard related to the inclusion of non-financial measures, but, however, the information that this management-control model provides were not used in order to plan the performances, to report about them or to develop a compensation system. It seems like that for the managers of the Serbian companies contemporary PMSs are still abstract concepts, which indicates the need for cooperation between the academic institutions and the industry.

As it might be expected, large companies have the leading role in implementing modern management techniques and tools in Serbia. However, the application of these techniques and tools in large enterprises is mostly not a result of the awareness of local managers, but the consequence of the requests of foreign partners, managers or owners. Managers point out that the important obstacle to the implementation of the modern management techniques and tools is a lack of time, since they are mostly occupied with daily, operational problems. In addition to the lack of time and lack of knowledge of modern PMS methodology, a reason for insufficient implementation of these systems in the Serbian enterprises, the cited authors find in the unwillingness of managers to learn, and in their resistance to replace intuition by objective methods of decision-making.

4. Barriers to the Implementation of the Modern Performance Measurement Systems in SMEs

The described gap between the theoretical emphasizing of the importance and the practical lagging in the implementation of the modern PMSs requires the identification of the reasons for the substantial reliance of SMEs on traditional PMSs and for keeping a narrow focus in business performance measurement. It is often argued that the modern PMSs are developed for the large enterprises, that they are usually analyzed and improved in this context, and as such they are inappropriate for SMEs (Garegno, Biazzo and Bititci, 2005, p. 28; Gumbus and Lussier, 2006, p. 408; Cocca and Alberti, 2010, p. 187).

One of the key problems that SMEs are faced with in their operations relate to the limited resource base. The narrow resource base of SMEs implies limitations both in the field of financial and physical, and in the field of intangible resources. In SMEs, generally, there is no expressed management
culture. So, in these enterprises technical knowledge and operational skills are often more important in relation to the management skills (Garengo, Biazzo and Bititci, 2005, p. 29). The responsibilities of a manager, which is often a business owner, are both the operational and strategic decisions. An entrepreneur who is in charge of the operational activities and of the management of its enterprise often neglects the latter (Garengo and Bernardi, 2007, p. 524). How success in implementing a PMS in large companies cannot be expected if there is no support of the top-level management, so the implementation of these systems in SMEs is impossible without the active and the affirmative role of the manager-owner. The key of success in implementing the PMSs is a support of the owner-manager who must approve the allocation of the resources, delegate the authority, and allow access to the "sensitive" data (Zinger, 2002, pp. 15-18). Identifying the goals, the measurement perspective, the targets and the causal connection between the measures is the primary task of the SME owner-manager (Krstić and Bonić, 2006, pp. 52, 53).

The strategic orientation of the modern PMSs is not in accordance with the "fire extinguishing" mentality of SMEs. The behavior of these enterprises is largely reactive with rarely present strategic planning and formalized decision-making (Garengo, Biazzo and Bititci, 2005, p. 30). SMEs orientation toward the short period and resolution of the operational problems is a result of the fact that these companies operate in a dynamic environment which they alone cannot influence (McAdam, 2000, p. 308). The strategy in these enterprises is rarely formally defined, and it is often a reflection of the goals, the preferences, and the personality of the owner (Miller and Toulouse, 1986, p. 1406). When the strategy is not clearly defined, identifying the key performance for its realization will be difficult.

The modern PMSs are often judged to be not dynamic enough to support the inherent flexibility of SMEs. The flexibility of these enterprises will be endangered by the unnecessary formalization and bureaucratization that may characterize a modern PMS. In that line is the attitude that SMEs do not need a formalized system of the performance measurement in the perspective of the consumer. This attitude is based on a fact that these enterprises have a narrower customer base while the bigger number of employees is in a direct contact with them. The formal system of information about the performances in the customer dimension can be characterized as an unnecessary waste of resources on the formalization of a system that should provide information that is already known to everyone (McAdam, 2000, p. 309). When the PMSs are perceived as a source of the bureaucracy and threat to the flexibility one cannot expect their acceptance in SMEs (Garengo, Biazzo and Bititci, 2005, p. 30).

Time required for the implementation of the PMSs (McAdam, 2000, p. 318; Zinger, 2002, p. 18), and the unclear relationship between the measures of non-financial performances and the financial results are inconsistent with the preference for quick results from SMEs’ owner-managers (Fisher, 1992 cited in Taticchi, Cagnazzo and Botarelli, 2008, p. 7). The modern PMSs are multidimensional in terms of necessary information sources. The implementation of these systems is additionally complicated by the lower level of development of the information systems in SMEs (Gareng, 2009, p. 95).

It is evident that there are some inconsistencies between the features of the most of the PMSs and the specific requirements of SMEs. The resource demanding, the complexity, the strategic orientation and the formality are some of the modern PMSs' characteristics that make them unfitted with the needs of SMEs' managers. Since SMEs are not smaller versions of the large companies (Welsh and White, 1981, p. 18), developing the PMSs that are adjusted to the needs of SMEs require an approach that is problem-specific.

5. Developing the Performance Measurement Systems
Consistent to the Needs of SMEs’ Management

The specific characteristics of SMEs are the framework for the development of the PMSs tailored to the needs of these enterprises. Cocca and Alberri (2010, pp. 191, 192) begin an overview of the important characteristics of SMEs with the classification of these characteristics into the group of the external, and the group of the internal environment characteristics of SMEs. Characteristics of the market and consumers are the specifics from the domain of the external environment. By a rule, SMEs cannot affect the dynamic environment in which they operate. Therefore, these enterprises are directed to the reactive behavior. A narrower customer base allows SMEs to build the closer relationships with them. However, SMEs' buyers are often stronger member of the supply chain which can have an important impact on SMEs' net cash flow. The narrow resource base is one of the most prominent features of the internal SMEs' environment. The limited access to the resources refers to the managerial competences as well. However, the smaller size of SMEs means simpler, less bureaucratic organizational structure. A smaller number or the lack of the management levels, favor personal relationships, and also is the basis for the faster communication and for a possibility for managers to have a direct insight into the business operations. In SMEs decisions are often made based on the owner-manager's intuition, not on an analysis of information. The time dimension of the management in these companies is mostly short-termed because SMEs operate in an environment of daily operational pressures and the uncertain survival.
Given these characteristics and constraints that SMEs are faced with, the question is whether these companies need a formalized and a comprehensive PMS (Garengo, Biazzo and Bititci, 2005, p. 41), or is the modern approach to the performance measurement necessary especially because of the described characteristics and limitations (Hudson, Smart and Bourne, 2001, p. 1105). Due to their "resource poverty" (Welsh and White, 1981, p. 18), errors in SMEs are more expensive (Taticchi, Gagnazzo and Botarelli, 2008, p. 5). In this regard it is stated that a narrow resource base of SMEs reinforces the importance of the improvement in the operational business dimension, so for these enterprises becomes crucial to reduce the level of losses and to achieve a higher level of productivity (Hudson, Smart and Bourne, 2001, p. 1105). Also, the organizational structure with fewer hierarchical levels means that employees in SMEs can do more things. Hence, the question of their competence and motivation becomes more important. This will require monitoring the performances in this dimension. A smaller number of customers increase the importance of their satisfaction and also the importance of a firm's adaptability to changing market conditions. Finally, the financial dimension is important for large companies, but for SMEs as well. Nevertheless, it seems that for SMEs the financial dimension can be even more important given their lack of the financial capacity to absorb the effects of the short-term fluctuations to which these companies cannot influence. Therefore, a more serious and broader perspective on the performance management in SMEs is gaining in importance, and the first step in the performance management is the performance measurement. Given the fact that the empirical researches show that there are problems in the implementation of the resource-demanding and the long-term oriented performance measurement systems in SMEs (Hudson-Smith and Smith, 2007, p. 396), it is necessary to develop a measurement system that is adapted to the information needs of SMEs' management, and the measurement system that is cost-efficient too.

The expansion of the measurement dimensions coverage, while maintaining the simplicity of the measurement itself, is one of the basic requirements of the PMSs developed for the needs of SMEs (McAdam, 2000, p. 309; Hudson, Smart and Bourne, 2001, p. 1106; Garengo, Biazzo and Bititci, 2005, p. 36; Cocca and Alberti, 2010, p. 190; Sousa and Aspinwall, 2010, p. 485). Namely, due to the limitations in terms of the available resources, SMEs are not only unable to implement complex PMSs, but they as such are not needed for the enterprises of this size (McAdam, 2000, p. 310). However, the simplicity of the model must not compromise its comprehensiveness. Therefore, the reduction of the system on a relatively small number of measures may deprive managers of the information necessary for decision making, and therefore cannot be an acceptable way of simplification of the PMSs (Garengo,

Biazzo and Bititci, 2005, p. 36; Cocca and Alberti, 2010, p. 187). Also, a holistic coverage of the measurement will be lost by simply reducing the number of measures in the PMSs models developed for large companies (McAdam, 2000, p. 319). All the elements of a simple PMS must be clear. This means that clear goals and measures must be defined and communicated, along with the definition of the procedures for collecting, processing, and presentation of the data (Garengo, Biazzo and Bititci, 2005, p. 35). In order to achieve a favorable cost-benefit ratio of a PMS, it is proposed to focus on several key measures which are desirable to be shown in a visual-agnostic manner (Cocca and Alberti, 2010, p. 193).

One of the reasons that the most of the contemporary PMSs are not appropriate for SMEs is their resource demanding characteristic. Design, implementation, operation, and maintenance of these systems may mean investing significant financial resources and time. The process of developing the Balanced Scorecard may last a relatively long time and this often discourages managers (Zinger, 2002, p. 9). When the employees are performing multiple tasks on a daily basis, they do not have time to carry out additional activities related to the implementation or functioning of the PMS (McAdam, 2000, p. 309; Garengo, Biazzo and Bititci, 2005, p. 29). Thus, the PMS adjusted to the needs of SME should be an economical one (Hudson, Smart and Bourne, 2001, p. 1112; Garengo, Biazzo and Bititci, 2005, p. 30; Garengo, 2009, p. 95; Cocca and Alberti, 2010, p. 193; Sousa and Aspinwall, 2010, p. 485).

Resource efficiency of a PMS will ensure its sustainability, while the presence of the short-term effects, with the necessary long-term potential of the system, will preserve the enthusiasm for its development over time (Hudson-Smith and Smith, 2007, p. 397). As already stated, SMEs cannot influence on market events and therefore must react and adapt to the changes. The dynamism of the environment reduces the importance of strategic planning in SMEs. So in these enterprises "... strategic management becomes primarily an adaptive process concerned with manipulating a limited amount of resources, usually, in order to gain the maximum immediate and short term advantage" (Jeanings and Beaver, 1997 cited in Hudson-Smith and Smith, 2007, p. 396). A PMS fitted to the needs of SMEs should keep a strategic orientation. However, the operational aspect is traditionally more critical to the success of SMEs, compared to the large companies. Therefore, the PMS in these enterprises should have to deal with operational issues as well. So, SMEs need a system that has the potential for long-term effects, but also a system that, in order to motivate managers and employees provides rapid results (McAdam, 2000, p. 320; Hudson, Smart and Bourne, 2001, p. 1112; Garengo, Biazzo and Bititci, 2005, p. 30).
One of the requirements to be met by the PMS refers to its dynamics. The dynamism of the performance measurement system is necessary in order to adequately monitor changes both in the external and the internal environment, and to update the performance measures so they can remain their strategic relevance. The dynamics of a PMS is a particularly important for the flexibility of SMEs, whose survival depends on the ability to quickly and adequately react to changes (Cocca and Alberti, 2010, p. 193). SMEs need a PMS that is dynamic, flexible and a system that promotes continuous improvement (Garengo, Biazzo and Bititci, 2005, pp. 30, 32; Taticchi, Cagnazzo and Botarelli, 2008, p. 10; Cocca and Alberti, 2010, p. 190). In the mid-sized companies a PMS should explicitly point out their strategy and make it "visible", i.e. clearer to all employees. Thus, the PMS can improve the ability of these companies to formulate and redefine their strategies. A dynamic and flexible measurement system in SMEs would demonstrate its strategic importance after a certain period of implementation (Hudson-Smith and Smith, 2007, p. 397).

Specificities of SMEs will determine the characteristics of the performance measurement systems that are developed according to the needs of these enterprises. Limited resources, proximity to the customers and a narrower customer base, reactive behavior, focus on current performances, and organizational structure with few hierarchical levels are the characteristics of SMEs that require a different approach to the development of the PMSs (Hudson-Smith and Smith, 2007, p. 395). The general conclusion is that the PMSs in SMEs should encourage continuous performance measurement and reporting, the gradual introduction of changes, these systems should be operationally easy to use, efficient, and flexible enough to monitor the changes in SMEs' environment (Hudson, Lean and Smart, 2001, p. 807).

Conclusion

The inadequate implementation of the modern performance measurement systems is one of the factors that limit the competitiveness of small and medium sized enterprises. Narrow focus of measurement (control), over-emphasis on financial measures and a relatively inadequate use of non-financial (operational) measures, are the dominant approaches to the performance measurement in these enterprises. The expansion of the measurement range and the identification of cause-effect relationships within and between individual measurement dimensions should promote and improve the strategic management process and contribute to the continuous improvement of the business performances in SMEs. However, changes into the dominant approach to the performance measurement in SMEs cannot be achieved by implementing the PMSs that have been developed for large companies. SMEs are resource-limited and operate in an environment in which, because of their financial strength, they do not have a

significant influence on. Thus, one of the reasons for the insufficient implementation of the modern performance measurement systems in SMEs is the fact that the most of these systems are not adapted to the specific needs of SMEs.

A development of the PMSs that are appropriate for SMEs requires the identification of the essential features and the information needs of the management in these enterprises. Harmonization of the PMS features and the characteristics of the small and medium sized enterprises will result in a performance measurement system whose implementation will be accepted and actively supported by SMEs' managers and employees. All previously emphasized SMEs' characteristics should be the starting point for developing an effective and efficient performance measurement system tailored to the needs of the management of these enterprises. The performance measurement systems in SMEs, as well as in large systems, should be strategically oriented, but also with an operational focus that is particularly relevant for the survival of SMEs. The effects of the application of these systems that are achieved in a relatively short period are crucial for their expansion, or acceptance in various SMEs. The PMSs defined for SMEs should not be complex in terms of the number of the measurement (control) dimensions and measures. Otherwise, they can slow down the decision-making and taking action process which would reduce SMEs' flexibility. Also, the PMSs must be sufficiently dynamic in terms of the range and the selection of the dimensions and the measures so that the management can timely and adequately monitor all relevant changes in the environment.

REFERENCES


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PROBLEMATIKA MERENJA I SISTEMA MERENJA PERFORMANSI U MALIM I SREDNJIM PREDUZEĆIMA

Rezime: Primena savremenih sistema merenja performansi može biti značajan impuls unapređenju konkurentnosti malih i srednjih preduzeća (MSP). Imajući to u vidu, cilj ovog rada je da ukaže na značaj i probleme u implementaciji ovih sistema u MSP, kao i da identifikuje načine prevazilaženja odstupanja između teorijskih preporuka i prakse. Nakon ukazivanja na razlike između tradicionalnog i savremenog pristupa merenju performansi, rad osvetljava mogući uticaj novijih koncepata sistema merenja performansi na unapređenje poslovanja i konkurentnosti MSP. Iako je pozitivan doprinos ovih sistema teorijski i empirijski potvrđen, implementacija savremenih sistema merenja performansi u mnogim MSP je suočena sa određenim problemima. Jedna od ključnih barijera je neprilagođenost ovih sistema potrebama menadžmenta MSP. Stoga je identifikovanje specifičnih karakteristika MSP i njihovo dovođenje u vezu sa poželjnim obeležjima sistema merenja performansi, prvi korak u rešavanju problematike merenja uspešnosti poslovanja malih i srednjih preduzeća.

Ključne reči: merenje performansi, sistemi merenja performansi, mala i srednja preduzeća, konkurentnost.